Subject: Re: Curious array behaviour?
Posted by steve on Fri, 15 Mar 1991 23:02:33 GMT
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In article <275@locke.water.ca.gov>, rfinch@caldwr.water.ca.gov (Ralph Finch) writes:
>
> PV-Wave 3.02 on a Sun 4.
>
> Array operations are quite powerful in idl-wave and so different from
> other languages that I think I still don't fully understand them.
> Here is something that has me puzzled:
>
> a=[1,2,3,4,5]
> print,a([-1])
>   -> 1
> print,a(-1)
>   -> ERROR
>
> Why the difference?

Looks like a 'feature' to me. One explanation for it might be that one
commonly will use this syntax for 'mapping' an array through a lookup
table, and in this case it makes sense to have range checking for
values off the end of the LUT and 'clamp' them to the end values... i.e.:

lut=[0.1,0.5,0.75,0.9,0.95]
values=[0,1,2,3,4,5,-1,11,4,3,2,7]
print,lut(values)
 -> .100000   .500000   .750000   .900000   .950000   .950000
 -> .100000   .950000   .950000   .900000   .750000   .950000

Isn't it fun to think up justifications for inconsistent program behavior...
and you get lots of practice working with WAVE/IDL :-).

-steve
--
---+"Come, Watson, come!"
 Steve Swales   (716) 275-0265,-3857,-5101| he cried. "The game is
 steve@lle.rochester.edu   (128.151.32.111)| afoot. Not a word!
                                  | Into your clothes and
 University of Rochester   250 East River Road| come!" S.H.
 Laboratory for Laser Energetics   Rochester, NY 14623| 'The Abbey Grange'